

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P882234

Luminaire Tested: **NVN-SB2A-735-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882234
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB2A-735-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9062 lumens
Efficiency: N/A
Efficacy: 158.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

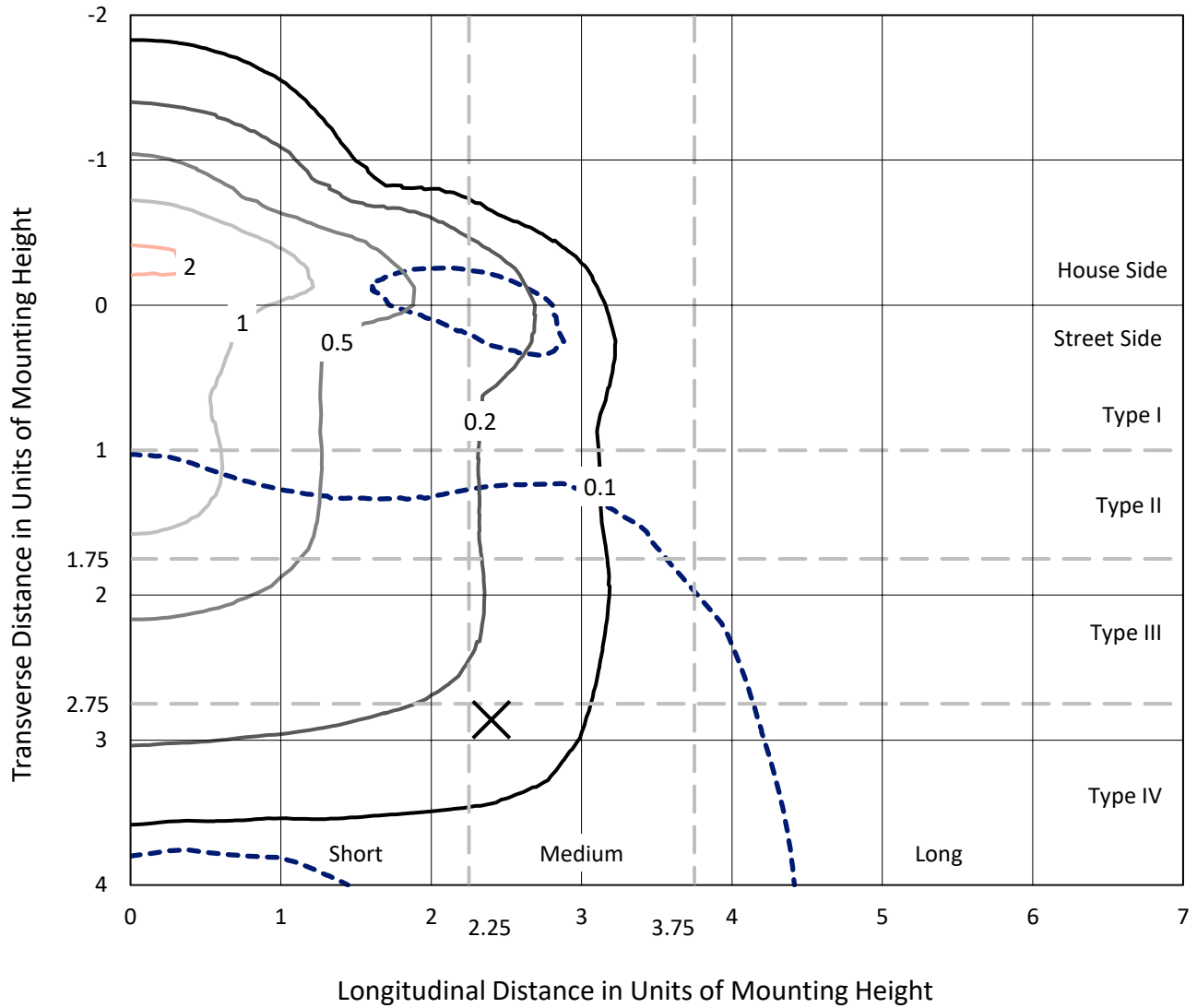
Input Watts (W): 57.3
Input Voltage (V): 120.0
Input Current (Ain): 0.484
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.038
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

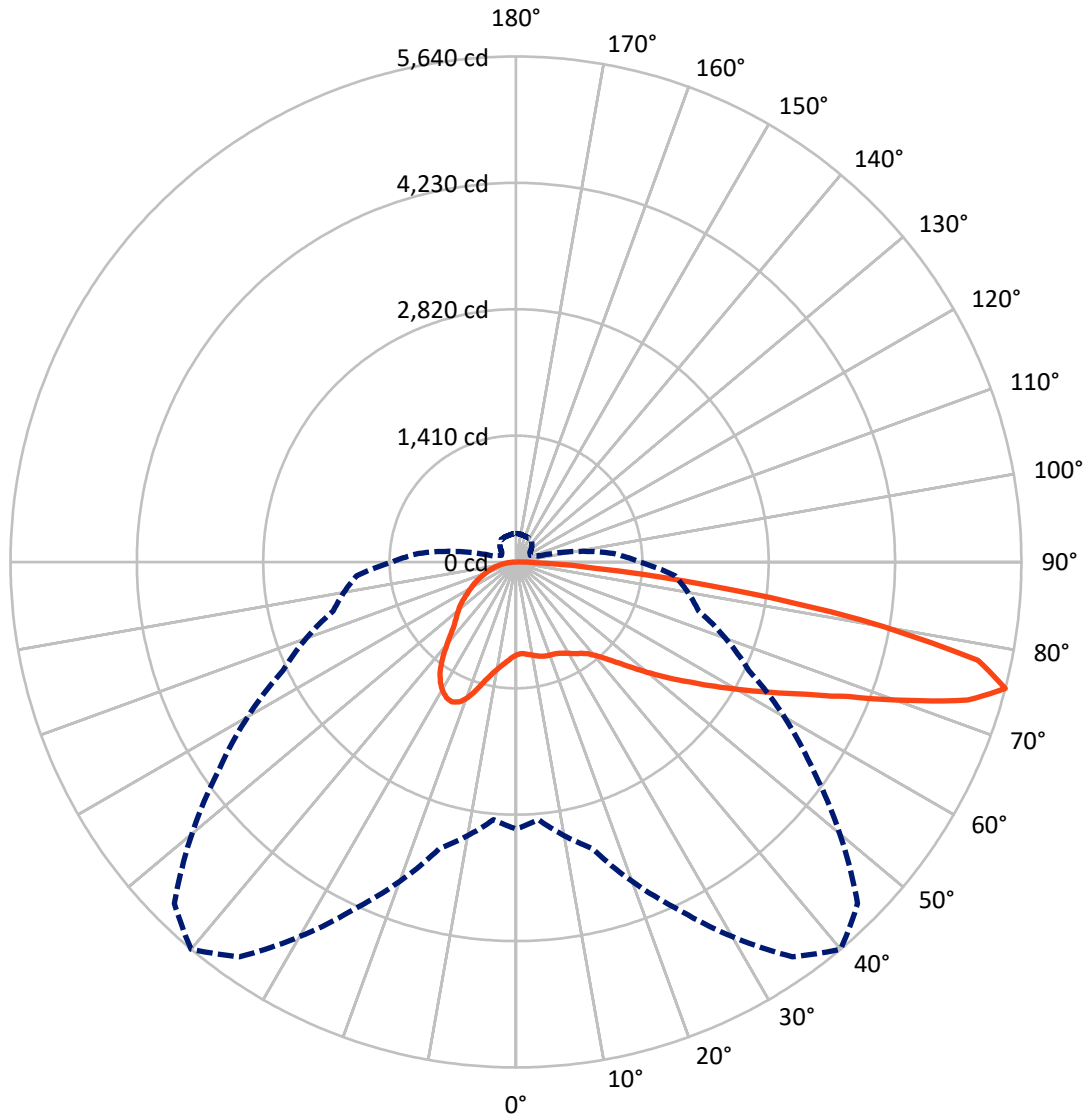
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 2807.7 | 0.0 | 2807.7 |
| | % Fixture | 31.0 | 0.0 | 31.0 |
| Street Side | Lumens | 6254.3 | 0.0 | 6254.3 |
| | % Fixture | 69.0 | 0.0 | 69.0 |
| Total | Lumens | 9062.0 | 0.0 | 9062.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 103.4 | 1.1 |
| 10°-20° | 347.3 | 3.8 |
| 20°-30° | 634.1 | 7.0 |
| 30°-40° | 899.4 | 9.9 |
| 40°-50° | 1214.4 | 13.4 |
| 50°-60° | 1633.7 | 18.0 |
| 60°-70° | 2073.5 | 22.9 |
| 70°-80° | 1881.9 | 20.8 |
| 80°-90° | 274.3 | 3.0 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-90° | 9062.0 | 100.0 |
| 0°-180° | 9062.0 | 100.0 |

Coefficient of Utilization



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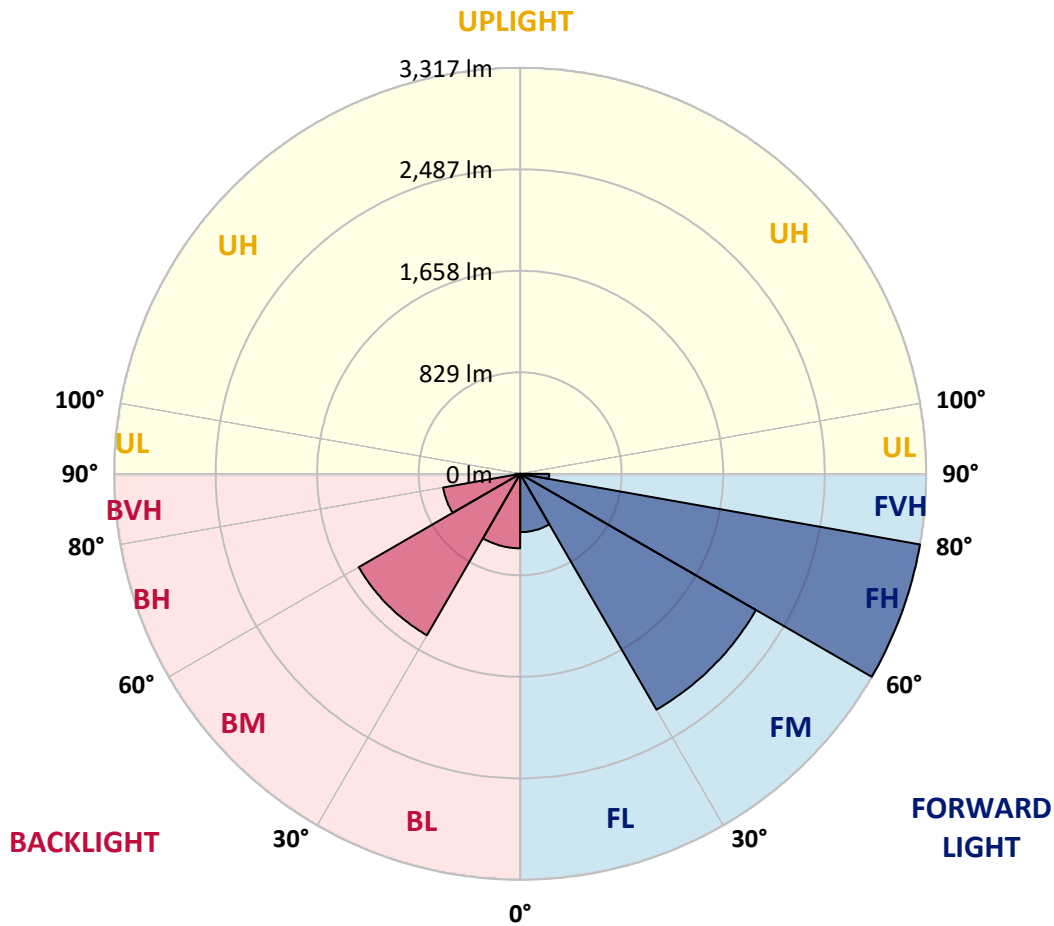
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 476.7 | 5.3 | | | |
| FM (30°-60°) | 2224.5 | 24.5 | | | |
| FH (60°-80°) | 3316.6 | 36.6 | | | G2/5000 |
| FVH (80°-90°) | 236.6 | 2.6 | | | G3/500 |
| BL (0°-30°) | 608.2 | 6.7 | B2/1000 | | |
| BM (30°-60°) | 1522.9 | 16.8 | B2/2500 | | |
| BH (60°-80°) | 638.8 | 7.0 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 37.8 | 0.4 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G3

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 40° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1036.3 | 1036.3 | 1036.3 | 1036.3 | 1036.3 | 1036.3 | 1036.3 | 1036.3 | 1036.3 | 1036.3 | 1036.3 |
| 2.5° | 1020.4 | 1026.2 | 1024.7 | 1022.8 | 1022.8 | 1023.3 | 1022.8 | 1026.2 | 1029.5 | 1032.9 | 1038.2 |
| 5° | 1031.0 | 1036.7 | 1033.8 | 1031.4 | 1029.5 | 1029.0 | 1027.6 | 1027.1 | 1029.0 | 1033.4 | 1040.6 |
| 7.5° | 1051.6 | 1057.4 | 1053.1 | 1048.7 | 1044.9 | 1043.0 | 1041.1 | 1038.2 | 1036.7 | 1039.1 | 1049.2 |
| 10° | 1074.7 | 1080.5 | 1075.2 | 1067.5 | 1061.2 | 1058.8 | 1056.9 | 1054.0 | 1052.1 | 1053.6 | 1064.6 |
| 12.5° | 1097.8 | 1103.5 | 1096.3 | 1085.8 | 1077.6 | 1076.1 | 1073.7 | 1072.8 | 1072.3 | 1071.8 | 1082.9 |
| 15° | 1119.4 | 1124.2 | 1115.1 | 1102.6 | 1093.9 | 1091.5 | 1089.1 | 1090.6 | 1093.0 | 1095.9 | 1108.3 |
| 17.5° | 1136.2 | 1141.0 | 1127.6 | 1111.2 | 1103.1 | 1102.1 | 1100.7 | 1105.5 | 1112.2 | 1119.4 | 1134.8 |
| 20° | 1151.6 | 1156.4 | 1139.1 | 1117.0 | 1107.4 | 1107.4 | 1107.9 | 1118.0 | 1127.6 | 1138.1 | 1159.3 |
| 22.5° | 1173.2 | 1177.1 | 1155.9 | 1125.7 | 1111.7 | 1112.7 | 1116.5 | 1126.6 | 1138.6 | 1153.0 | 1182.4 |
| 25° | 1205.4 | 1208.3 | 1182.4 | 1142.0 | 1126.1 | 1129.0 | 1132.4 | 1137.2 | 1148.7 | 1165.5 | 1205.0 |
| 27.5° | 1257.3 | 1259.7 | 1225.6 | 1170.8 | 1146.8 | 1151.6 | 1156.4 | 1153.0 | 1158.3 | 1172.8 | 1223.2 |
| 30° | 1330.4 | 1331.8 | 1288.6 | 1216.0 | 1181.9 | 1184.3 | 1185.2 | 1171.3 | 1161.2 | 1172.8 | 1236.2 |
| 32.5° | 1416.9 | 1416.4 | 1365.0 | 1270.8 | 1221.8 | 1219.4 | 1211.2 | 1183.8 | 1160.3 | 1170.3 | 1247.7 |
| 35° | 1551.0 | 1545.7 | 1479.4 | 1347.7 | 1267.0 | 1252.1 | 1232.8 | 1197.7 | 1165.1 | 1167.9 | 1257.8 |
| 37.5° | 1773.1 | 1756.7 | 1664.9 | 1473.6 | 1334.2 | 1296.3 | 1267.9 | 1220.3 | 1175.6 | 1167.0 | 1269.8 |
| 40° | 2023.5 | 2002.8 | 1901.9 | 1646.2 | 1435.2 | 1374.1 | 1328.5 | 1252.5 | 1192.9 | 1171.3 | 1287.6 |
| 42.5° | 2320.5 | 2291.2 | 2182.6 | 1849.5 | 1563.0 | 1474.6 | 1405.9 | 1293.4 | 1218.4 | 1185.2 | 1311.7 |
| 45° | 2685.3 | 2646.4 | 2492.6 | 2078.8 | 1724.0 | 1606.3 | 1514.5 | 1355.4 | 1257.3 | 1212.2 | 1347.7 |
| 47.5° | 3054.0 | 3063.6 | 2844.9 | 2341.2 | 1917.3 | 1768.7 | 1650.5 | 1448.6 | 1314.1 | 1255.4 | 1405.9 |
| 50° | 3445.7 | 3452.4 | 3195.3 | 2632.0 | 2136.4 | 1952.3 | 1803.3 | 1552.9 | 1392.9 | 1316.9 | 1492.9 |
| 52.5° | 3751.4 | 3752.3 | 3513.5 | 2936.2 | 2364.7 | 2154.2 | 1968.2 | 1672.1 | 1484.2 | 1398.7 | 1608.7 |
| 55° | 3942.7 | 3940.3 | 3736.5 | 3224.1 | 2627.2 | 2366.2 | 2150.8 | 1807.7 | 1595.7 | 1494.8 | 1754.3 |
| 57.5° | 4081.6 | 4074.4 | 3890.3 | 3471.6 | 2906.9 | 2616.6 | 2357.5 | 1961.5 | 1727.4 | 1609.2 | 1946.1 |
| 60° | 4134.4 | 4130.1 | 3994.6 | 3685.5 | 3201.0 | 2893.4 | 2595.9 | 2133.5 | 1876.9 | 1744.2 | 2192.7 |
| 62.5° | 4154.6 | 4162.8 | 4096.9 | 3892.7 | 3515.9 | 3200.1 | 2857.9 | 2339.3 | 2045.1 | 1897.1 | 2452.7 |
| 65° | 4225.8 | 4240.7 | 4227.2 | 4163.8 | 3871.5 | 3559.1 | 3205.4 | 2583.9 | 2228.7 | 2061.0 | 2724.2 |
| 67.5° | 4366.6 | 4381.5 | 4387.2 | 4488.2 | 4306.0 | 4006.6 | 3638.9 | 2888.6 | 2443.6 | 2231.1 | 2928.5 |
| 70° | 4363.2 | 4358.9 | 4460.8 | 4746.3 | 4850.1 | 4626.1 | 4223.4 | 3263.5 | 2699.7 | 2372.4 | 2954.5 |
| 72.5° | 3971.5 | 3936.9 | 4177.7 | 4743.4 | 5302.9 | 5273.1 | 4937.1 | 3747.0 | 2920.8 | 2389.7 | 2563.7 |
| 75° | 2979.5 | 2887.2 | 3312.5 | 4274.8 | 5378.3 | 5640.3 | 5390.8 | 4047.0 | 2868.4 | 2111.4 | 1784.1 |
| 77.5° | 1274.2 | 1181.4 | 1682.7 | 3164.5 | 4813.6 | 5272.6 | 4974.6 | 3530.8 | 2289.8 | 1396.2 | 876.2 |
| 80° | 333.6 | 333.1 | 508.5 | 1434.7 | 3273.6 | 3893.6 | 3415.9 | 2280.1 | 1308.3 | 498.9 | 241.8 |
| 82.5° | 137.9 | 134.6 | 187.0 | 558.0 | 1599.6 | 2185.0 | 1783.2 | 1017.0 | 472.5 | 135.1 | 80.3 |
| 85° | 51.4 | 50.9 | 90.8 | 192.7 | 564.3 | 901.2 | 652.2 | 260.0 | 117.8 | 65.8 | 36.0 |
| 87.5° | 14.4 | 13.9 | 19.7 | 66.8 | 137.5 | 208.6 | 111.5 | 42.8 | 33.2 | 26.0 | 10.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1036.3 | 1036.3 | 1036.3 | 1036.3 | 1036.3 | 1036.3 | 1036.3 | 1036.3 | 1036.3 | 1036.3 | 1036.3 |
| 2.5° | 1039.6 | 1042.0 | 1046.3 | 1049.7 | 1054.0 | 1058.8 | 1065.6 | 1069.9 | 1074.2 | 1077.1 | 1075.2 |
| 5° | 1043.9 | 1049.2 | 1060.3 | 1071.3 | 1084.3 | 1096.3 | 1110.3 | 1120.4 | 1128.5 | 1130.9 | 1131.9 |
| 7.5° | 1053.6 | 1062.2 | 1081.0 | 1099.7 | 1120.4 | 1140.1 | 1160.3 | 1177.6 | 1191.5 | 1196.8 | 1197.3 |
| 10° | 1070.4 | 1081.9 | 1108.3 | 1134.8 | 1162.2 | 1192.5 | 1218.4 | 1243.4 | 1263.1 | 1271.3 | 1271.8 |
| 12.5° | 1091.5 | 1105.9 | 1140.5 | 1177.1 | 1215.0 | 1256.9 | 1290.5 | 1321.3 | 1345.8 | 1356.8 | 1356.8 |
| 15° | 1118.9 | 1137.7 | 1181.9 | 1230.9 | 1286.7 | 1344.8 | 1387.6 | 1421.7 | 1449.1 | 1462.6 | 1461.6 |
| 17.5° | 1148.7 | 1173.7 | 1229.5 | 1303.5 | 1383.3 | 1459.7 | 1509.7 | 1534.7 | 1563.0 | 1576.0 | 1575.5 |
| 20° | 1177.6 | 1208.3 | 1288.1 | 1395.8 | 1502.0 | 1583.2 | 1623.6 | 1630.3 | 1632.2 | 1633.7 | 1637.5 |
| 22.5° | 1207.4 | 1248.7 | 1361.6 | 1512.1 | 1626.0 | 1682.2 | 1688.0 | 1659.2 | 1618.8 | 1600.0 | 1605.3 |
| 25° | 1240.0 | 1294.8 | 1457.8 | 1640.4 | 1732.7 | 1739.4 | 1695.2 | 1625.0 | 1548.6 | 1513.5 | 1518.8 |
| 27.5° | 1271.8 | 1348.2 | 1573.1 | 1763.0 | 1809.6 | 1750.5 | 1655.3 | 1555.8 | 1463.5 | 1426.5 | 1430.9 |
| 30° | 1303.5 | 1409.2 | 1700.5 | 1870.2 | 1844.7 | 1723.1 | 1592.3 | 1481.3 | 1388.6 | 1349.6 | 1354.0 |
| 32.5° | 1335.7 | 1480.4 | 1847.1 | 1947.5 | 1838.4 | 1664.9 | 1514.0 | 1397.7 | 1316.0 | 1275.1 | 1280.4 |
| 35° | 1372.2 | 1567.8 | 1986.0 | 1989.8 | 1796.6 | 1579.4 | 1410.7 | 1297.7 | 1226.6 | 1193.9 | 1201.1 |
| 37.5° | 1419.8 | 1678.9 | 2108.6 | 2000.4 | 1723.6 | 1453.9 | 1282.3 | 1179.5 | 1120.8 | 1105.9 | 1116.5 |
| 40° | 1478.9 | 1812.5 | 2202.3 | 1983.6 | 1615.4 | 1301.6 | 1142.0 | 1059.8 | 1026.6 | 1030.0 | 1041.5 |
| 42.5° | 1555.8 | 1962.0 | 2268.1 | 1940.3 | 1465.0 | 1144.4 | 1018.9 | 982.4 | 998.3 | 1011.7 | 1024.2 |
| 45° | 1655.8 | 2117.2 | 2309.0 | 1866.8 | 1294.8 | 1011.3 | 946.4 | 955.0 | 967.0 | 968.5 | 978.1 |
| 47.5° | 1783.6 | 2274.4 | 2335.9 | 1755.8 | 1121.3 | 917.5 | 900.2 | 902.2 | 899.8 | 889.7 | 897.3 |
| 50° | 1943.2 | 2427.2 | 2359.9 | 1608.7 | 973.8 | 858.9 | 835.8 | 829.1 | 795.9 | 763.3 | 767.6 |
| 52.5° | 2124.9 | 2567.6 | 2370.0 | 1426.0 | 858.9 | 809.9 | 772.4 | 730.1 | 668.1 | 658.0 | 661.4 |
| 55° | 2326.8 | 2697.3 | 2344.1 | 1201.6 | 762.3 | 746.9 | 690.2 | 639.2 | 632.5 | 623.9 | 625.3 |
| 57.5° | 2568.0 | 2837.2 | 2291.2 | 951.2 | 663.3 | 673.4 | 618.1 | 623.9 | 611.8 | 598.4 | 596.0 |
| 60° | 2831.9 | 2981.9 | 2198.4 | 722.9 | 560.9 | 581.6 | 599.4 | 598.9 | 595.5 | 584.5 | 580.6 |
| 62.5° | 3069.3 | 3077.0 | 2015.8 | 553.7 | 471.0 | 510.4 | 559.0 | 558.5 | 555.6 | 549.4 | 547.0 |
| 65° | 3210.7 | 3062.6 | 1711.1 | 435.9 | 397.0 | 451.8 | 504.2 | 508.0 | 508.5 | 508.0 | 508.0 |
| 67.5° | 3185.7 | 2893.9 | 1292.9 | 347.0 | 336.0 | 392.2 | 449.9 | 455.2 | 459.0 | 460.0 | 460.9 |
| 70° | 2903.0 | 2523.3 | 843.0 | 276.8 | 281.7 | 339.8 | 398.4 | 403.7 | 407.1 | 410.9 | 412.9 |
| 72.5° | 2262.8 | 1855.3 | 482.6 | 224.0 | 234.1 | 294.6 | 347.5 | 353.7 | 355.7 | 362.9 | 365.8 |
| 75° | 1378.9 | 1091.0 | 260.5 | 176.4 | 192.3 | 251.9 | 297.0 | 304.2 | 307.6 | 316.3 | 317.2 |
| 77.5° | 655.6 | 472.5 | 148.5 | 137.5 | 154.8 | 205.7 | 250.9 | 259.1 | 249.9 | 254.7 | 250.9 |
| 80° | 221.6 | 175.4 | 93.7 | 104.8 | 118.2 | 160.5 | 200.9 | 209.1 | 189.9 | 188.9 | 187.0 |
| 82.5° | 77.4 | 71.1 | 59.6 | 69.7 | 76.4 | 114.9 | 151.9 | 162.5 | 141.3 | 140.8 | 134.1 |
| 85° | 30.3 | 28.8 | 33.2 | 38.0 | 45.7 | 70.7 | 100.0 | 105.3 | 87.0 | 70.2 | 69.2 |
| 87.5° | 6.2 | 6.7 | 8.2 | 8.7 | 13.9 | 24.5 | 36.0 | 44.2 | 35.1 | 29.8 | 27.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)